Role and Structure of Hunting

Presented to:

Grizzly Bear Advisory Committee
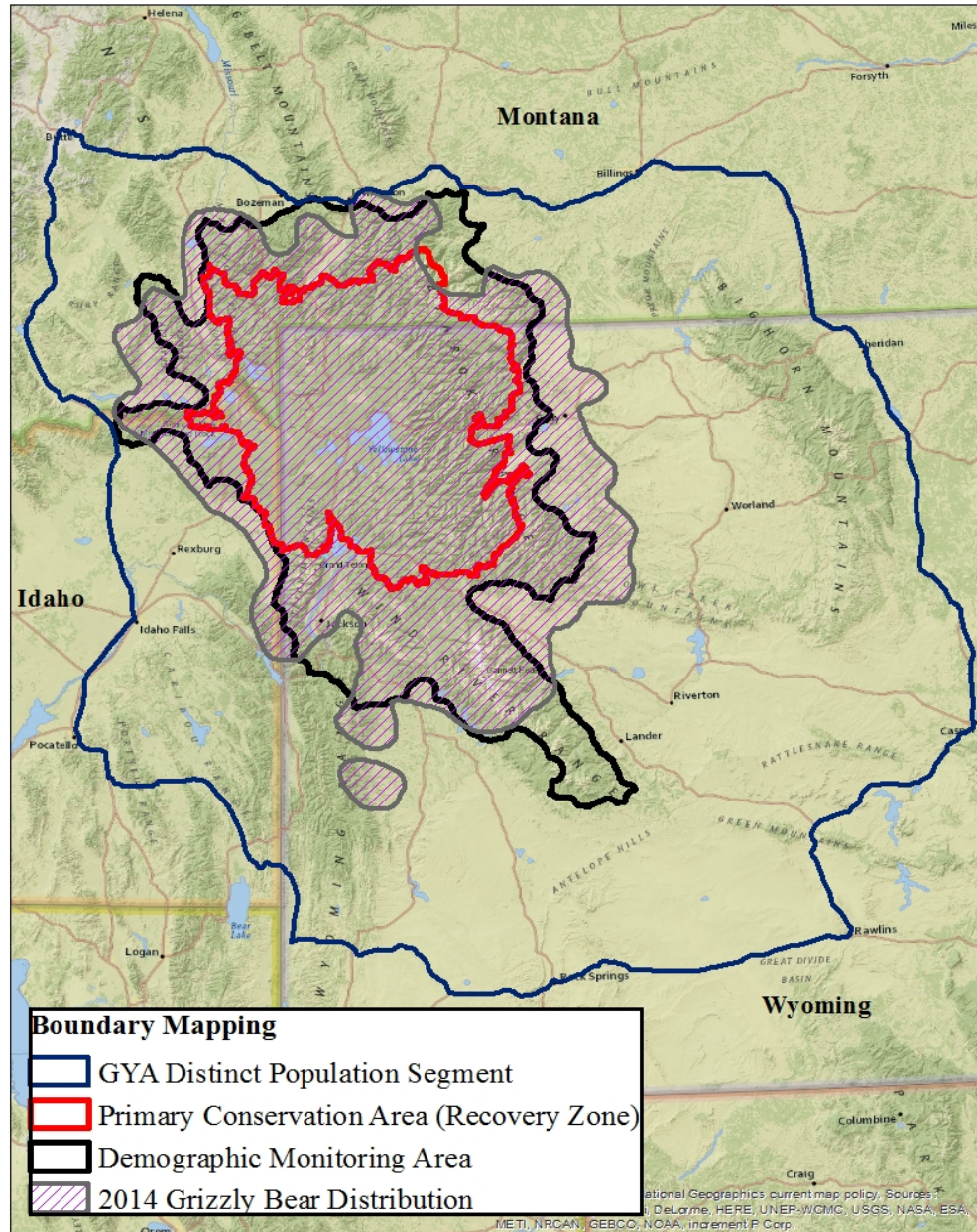
by:

Ken McDonald

Montana Fish, Wildlife and Parks

April 9, 2020

YELLOWSTONE DELISTED AREA + DMA

Boundary Mapping

— GYA Distinct Population Segment
— Primary Conservation Area (Recovery Zone)
— Demographic Monitoring Area
▨ 2014 Grizzly Bear Distribution

PROPOSED DELISTNG RULE

- INCLUDES AGREED UPON COMMITMENT TO MANAGE AROUND THE 95% CI OF THE 2002-2014 AVERAGE POPULATION ESTIMATE (600 – 674 – 747)

- INCLUDES REQUIREMENT OF MORTALITY THRESHOLDS BASED ON CHAO2 POPULATION ESTIMATE

- INCLUDES AS A CONDITION OF DELISTNG THAT THE STATE AND FEDERAL MANAGEMENT AGENCIES FINALIZE CONSERVATION STRATEGY

- INCUDES AS A CONDITION OF DELISTING THAT STATES HAVE IN PLACE HUNTING SEASON FRAMEWORKS

RECOVERY PLAN AMENDMENT

- Maintain the population around the 2002-2014 model-averaged Chao2 estimate for the total population (average = 674; 95% CI = 600-747) by maintaining annual mortality limits for independent males, independent females, and dependent young.
- SLIDING SCALE…..

COMMON TO ALL DOCUMENTS

	Total Grizzly Bear Population Estimate		
	$\leq$674	675-747	>747
Total mortality rate for independent FEMALES.	$\leq$7.6%	9%	10%
Total mortality rate for independent MALES.	$\leq$15%	20%	22%
Total mortality rate for dependent young.	$\leq$7.6%	9%	10%

TRI STATE MOA

- APPENDIX P TO CONSERVATION STRATEGY
- DESCRIBES HOW MT, WY, and ID WILL COLLECTIVELY MANAGE AT AN ECOSYSTEM SCALE TO ENSURE RECOVERY IS MAINTAINED
- SIGNED BY EACH STATE'S COMMISSION AND DIRECTOR
- DEMONSTRATES REGULATORY COMMITMENTS

Tri State MOA

- Begin with DMA Chao2 total population estimate for the previous calendar year, as reported by the IGBST. 718

- Determine the maximum allowable mortality limit for each demographic class based on the mortality rates identified in the table above.

  50 independent males; 22 independent females

- Determine total mortality during the previous calendar year for each demographic class.

  33 independent males; 20 independent females

Tri State MOA

- Subtract the previous year's total mortality from the maximum allowable mortality limit for each demographic class. 50-33 = 17 males; 22.5-20 = 2.5 females

- 17 Males and 2.5 Females divided between 3 states

- If the difference is negative (*i.e.,* a DMA annual mortality limit is exceeded for any of the three classes), the number of mortalities above the limit will be subtracted from the corresponding DMA discretionary mortality limit for that class for the current year.

Tri State MOA

- Allocate discretionary mortality available for regulated harvest for independent males and females to each management jurisdiction
- Default is based on geographic area of each state within the GYE

    (34% MT – 58% WY – 8% ID)

Allocate potential harvest mortality available by State

	2017 DMA Population Estimate		2017 DMA Mortality Thresholds
Independent males	250		50.0
Independent females	250		22.5
Dependent young	217		20
Total	**718**		

	2017 DMA Grizzly Bear Mortality		2018 Available DMA Harvest Limits
Independent males	33		17
Independent females	20		2.5
Dependent young	12		N/A

	Wyoming (58% of DMA)	Montana (34% of DMA)	Idaho (8% of DMA)
Independent males	9.9	5.8	1.4
Independent females	1.5	0.9	0.2

MONTANA HUNTING SEASON FRAMEWORK

- DELISTING REQUIREMENT OF USFWS
- FRAMEWORK – NUMBERS/QUOTAS WILL BE PROPOSED AT A FUTURE DATE IF THE STATE DECIDES TO MOVE FORWARD WITH A SEASON
- WILL REQUIRE ADDITIONAL COMMISSION ACTION

20XX

GRIZZLY BEAR

Montana Hunting Regulations

Montana Fish, Wildlife & Parks

Grizzly bear. Ursus arctos horribilis. Photo by Donald M. Jones

Apply for General Licenses and Special Licenses Online: fwp.mt.gov

HUNTING SEASON FRAMEWORK

GUIDING PRINCIPLES

- Maintain a viable grizzly bear population in the GYE under state management.

- Increase broad public acceptance of sustainable harvest and hunter opportunity as an effective part of successful, long-term grizzly bear conservation.

- Maintain positive and effective working relationships with stakeholders.
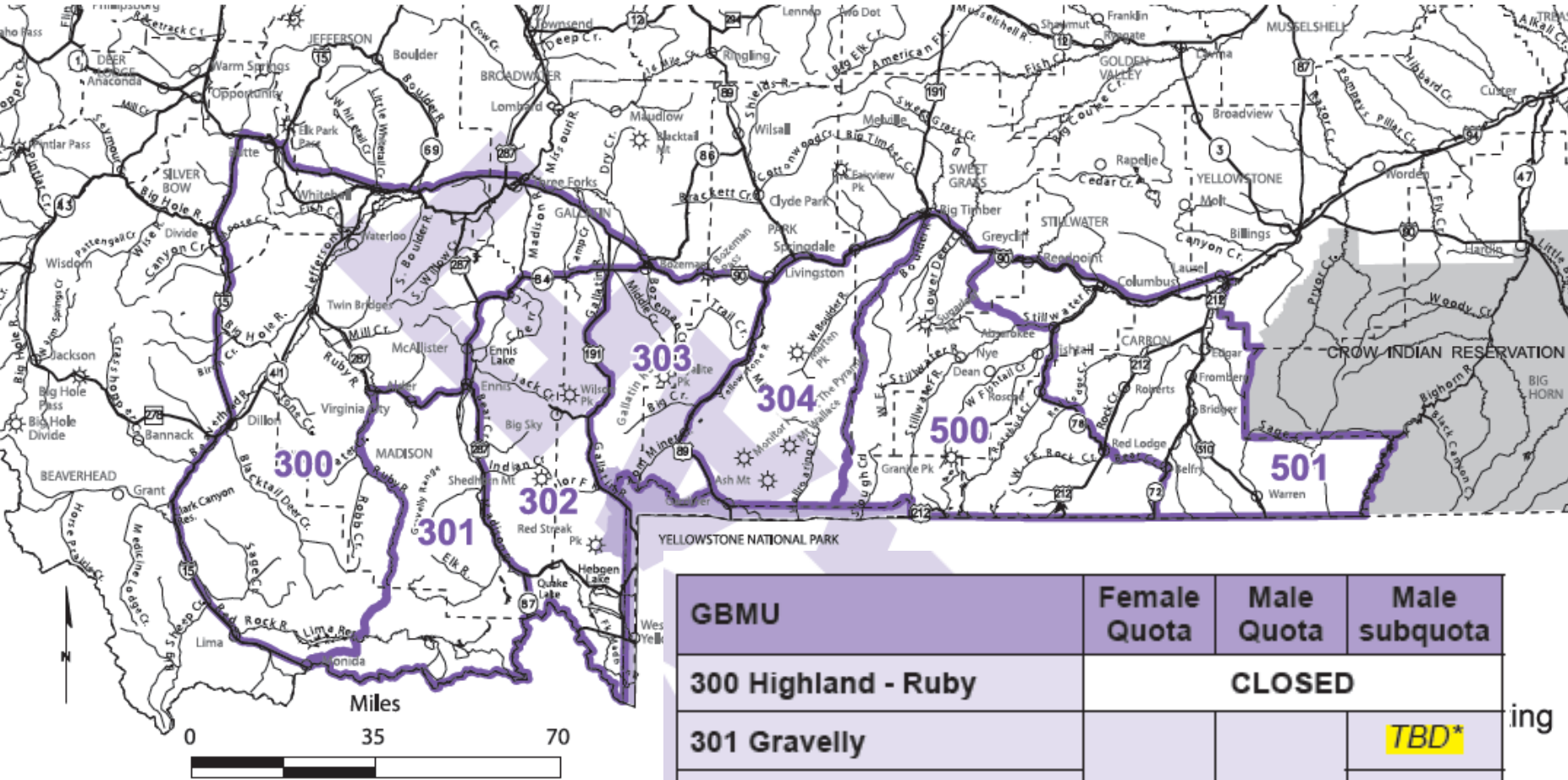
HUNTING SEASON FRAMEWORK

- EXTREMELY CONSERVATIVE
  - MORTALITY LIMITS BASED ON CONSERVATIVE ESTIMATOR
  - TAKES INTO ACCOUNT ALL SOURCES OF MORTALITY FROM THROUGHOUT THE ECOSYSTEM
  - QUOTA BASED w/ LIMITED NUMBER OF LICENSES
  - CONSERVATIVE SEASON DATES

HUNTING SEASON FRAMEWORK

- EXTREMELY CONSERVATIVE
  - MORTALITY LIMITS BASED ON CONSERVATIVE ESTIMATOR
  - TAKES INTO ACCOUNT ALL SOURCES OF MORTALITY FROM THROUGHOUT THE ECOSYSTEM
  - QUOTA BASED w/ LIMITED NUMBER OF LICENSES
  - CONSERVATIVE SEASON DATES

HUNTING SEASON FRAMEWORK

- BEAR MANAGEMENT UNITS
  - INCORPORATE PORTIONS OF DMA AND OUT OF DMA
  - FEMALE QUOTA APPLIES COLLECTIVELY TO ALL UNITS
  - MALE SUB QUOTAS APPLY TO INDIVIDUAL UNITS – WILL PRCLUDE DISPROPORTIONATE TAKE IN ANY ONE UNIT
- SEASON DATES
  - SPRING – March 15 – April 20
  - FALL – November 10 - December 15

GBMU	Female Quota	Male Quota	Male subquota
300 Highland - Ruby	CLOSED		
301 Gravelly			*TBD**
302 Madison			*TBD**
303 Gallatin - Yellowstone	*TBD**	*TBD**	*TBD**
304 Yellowstone - Boulder			*TBD**
500 Beartooth Face			*TBD**
501 Stillwater - Bighorn	CLOSED		

Reference map shows Grizzly Bear Management Units' orientation within the State of Montana.
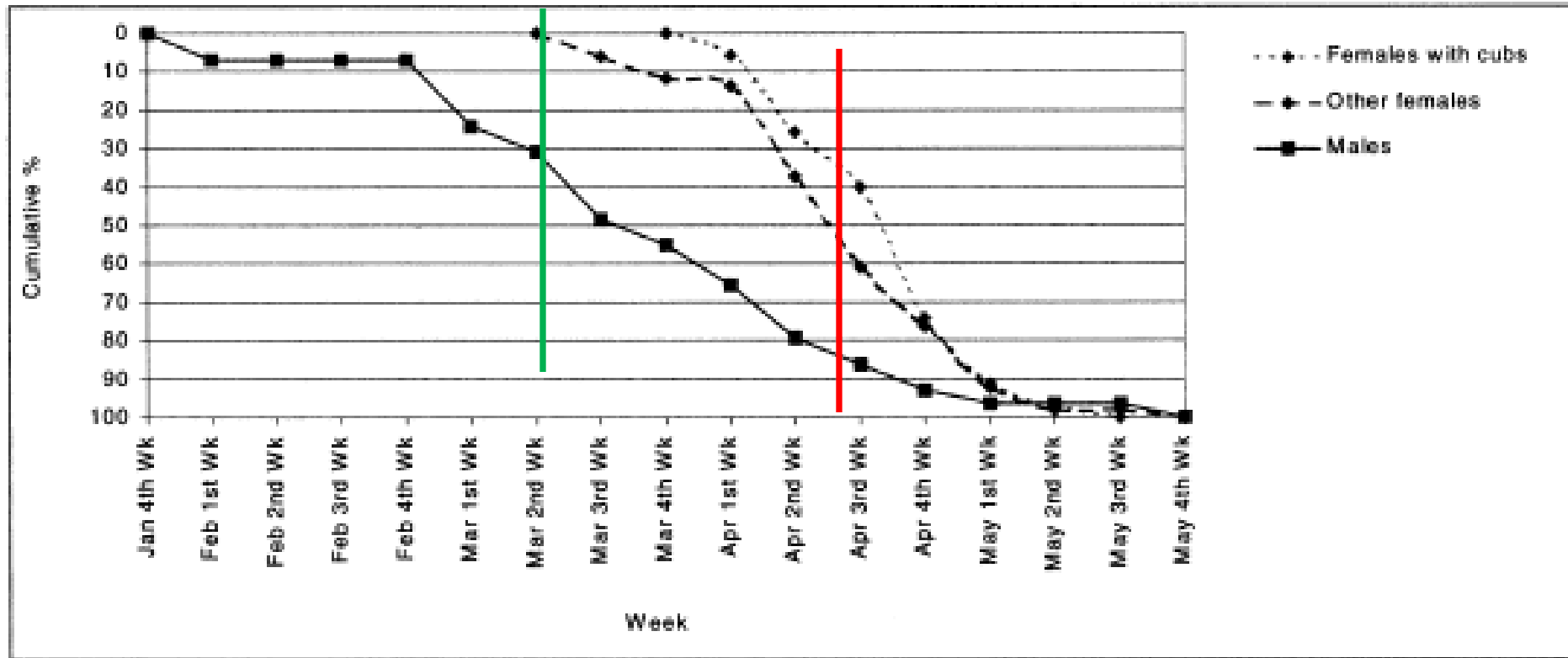
* *TBD** = To Be Determined

DEN EMERGENCE

Fig. 3. Cumulative percent of bears emerged from dens by week in the Greater Yellowstone Ecosystem, 1975–99. Week of den emergence was determined for bears if the days between their last known location in dens and their first known active location was ≤14 days.
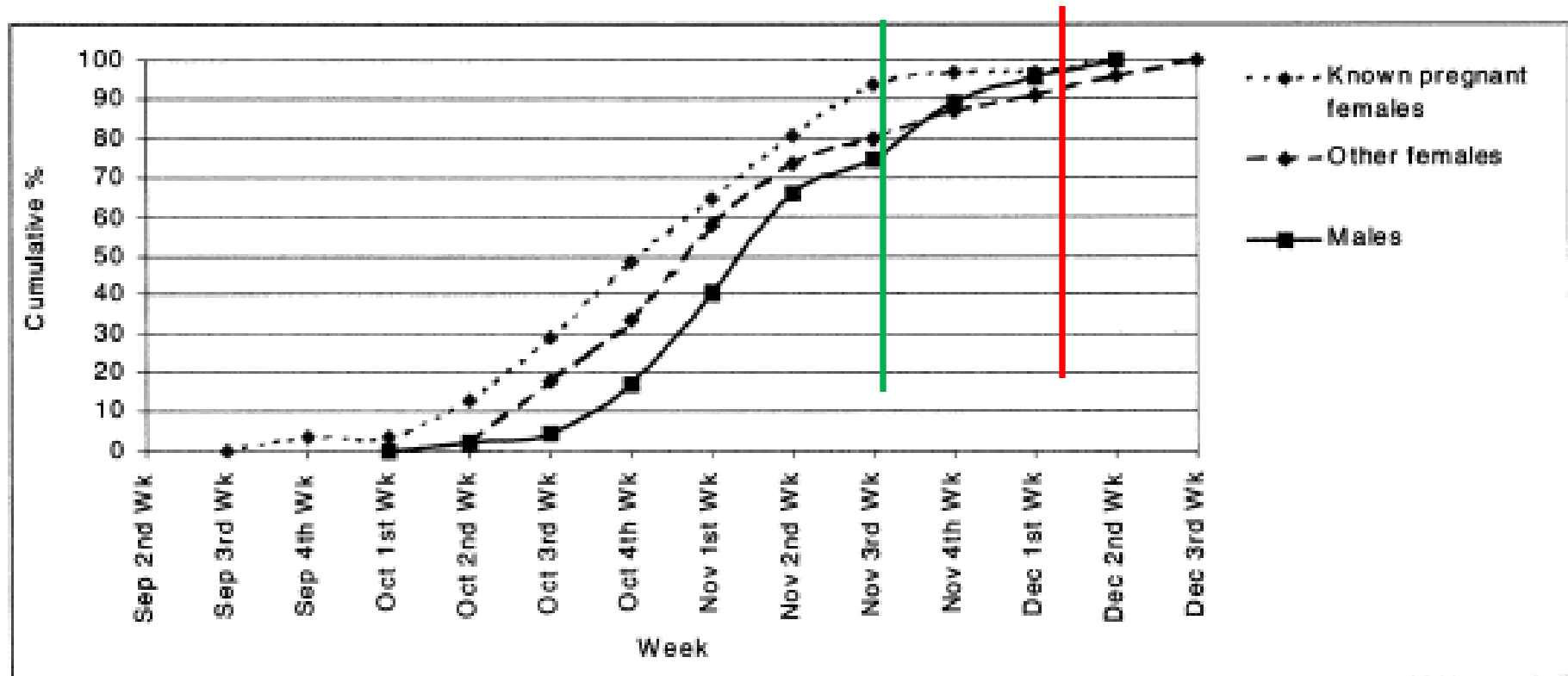
DEN ENTRY

Fig. 2. Cumulative percent of grizzly bears denned by week in the Greater Yellowstone Ecosystem, 1975–99. Week of den entry was determined for bears if the days between their last known pre–den location and their first known date denned was ≤14 days.

HUNTING SEASON FRAMEWORK

- 12 HOUR REPORTING REQUIREMENT
- 24-HOUR CLOSURE
- MANDATORY ORIENTATION
- NUMBER OF LICENSES = NUMBER OF BEARS AVAILABLE
- NO TAKING OF BEARS ACCOMPANIED BY OTHER BEARS